company on the highlands of the Cordillera in Peru and Ecuador, but as we go farther south the latter are found on the plains of southern Argentina and Patagonia, as well as on tlie island of Tierra del Fuego at the sea level. Here then is a clear proof of the intimate connexion existing between temperature and station ; the gnanaco being an animal which can only live in cold or temperate climates, finds suitable conditions for its existence in tropical latitudes solely at a height of so many thousands of feet, although farther south it is able to thrive at the sea level" This, however, cannot be pushed too far—the world cannot be mapped out into areas "bounded by parallels of temperattire as was once attempted—since there are plenty of cases like that of the Tiger, which is as much at home in a tropical jungle as on the icy plains of Northern Asia.

Seeing that there are in many cases no climatic barriers to the spreading of a given race of animals over a larger area of distribution than it actually occupies, it becomes important to inquire why there are so many cases of restriction in range.

It is possible to see, at any rate, three causes which are responsible for a large number of such cases. In the first place, a given species of animal must have originated at a certain spot; its multiplication in individuals must always be a slow matter, since enemies, and untoward events generally, would conspire to check the natural multiplication by geometrical progression. A long time might therefore elapse before the species greatly extended its range. A restricted distribution may therefore, in some cases, mean a modern race. In the second place, there are definite physical barriers which check the migration of species. The terrestrial Mammalia cannot cross wide arms of the sea; that they can and do swim for considerable distances has been proved in several instances; but, as has been pointed out, it is unlikely that a purely terrestrial mammal would voluntarily swim out into an unknown sea. And then if it did, and successfully reached the opposite side,

nothing would happen unless it were a pregnant female; or, if not pregnant, till a male swain very soon afterwards in exactly the same direction. Many travellers have told of floating islands, formed of torn-up trees and brushwood, which have been seen at the mouths of large rivers, with animal passengers upon them* These are, however, so imieh at the mercy of currents and storms.